

The Casimir effect for planar layered system

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Abstract

© 2016 World Scientific Publishing Company. We consider the Casimir energy and force for stack of the N conductive planes at zero temperature. The Casimir-Polder force for an atom near this stack is calculated, too. We derive general expressions and make analysis for the case of ideal metal. In all considered cases the finite conductivity plays important role for the Casimir effect.

<http://dx.doi.org/10.1142/S0217751X16410281>

Keywords

Casimir effect, graphene, layered systems